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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,542	02/27/2004	Frederic Scheer	112843-63	7084
24573 7590 08/10/2007 BELL, BOYD & LLOYD, LLP P.O. Box 1135 CHICAGO, IL 60690			EXAMINER CHEN, VIVIAN	
			ART UNIT 1773	PAPER NUMBER
			MAIL DATE 08/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/788,542	Applicant(s) SCHEER ET AL.	
	Examiner Vivian Chen	Art Unit 1773	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☒ They raise the issue of new matter (see NOTE below);
 (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see Detailed Advisory Action. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1-6, 11, 12, 14-16 and 18-27.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☒ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see Detailed Advisory Action.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.

Vivian Chen
Primary Examiner
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DETAILED ADVISORY ACTION

1. Claims 7-10, 13, 17, 28-30 have been cancelled by Applicant in the Amendment filed 10/5/2005.

Response to Proposed Amendments

2. The proposed amendments filed 7/18/2007 will **NOT** be entered because they raise new issues that would require further consideration and/or search. The proposed amendments (e.g., the amount of organic peroxide, the recitation of the specified components as “starting materials”, etc.) have not been presented.

Response to Submitted Affidavit

3. The Affidavit filed 7/18/2007 will **NOT** be entered (see item #8 in the attached PTOL-303).

Specification

4. The amendment filed 1/24/2007 remains objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure for the reasons stated in the Final Office Action mailed 5/3/2007.

The Examiner specifically notes that the disclosure as originally filed provides no support whatsoever for the presence of “an organic acid” (claim 25) in the claimed composition(s).

Claim Rejections - 35 USC § 112

5. Claims 1-4, 6, 11-12, 14, 16, 18-27 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement for the reasons stated in the Final Office Action mailed 5/3/2007.

Claim Rejections - 35 USC § 103

6. Claims 1-6, 11-12, 14-16, 18-27 remain rejected under 35 U.S.C. 103(a) as being unpatentable over CHEN ET AL (US 5,756,651);
in view of GRUBER ET AL (US 5,594,095);
and in view of MOHANTY ET AL (US 6,869,985) or KRISHNAN ET AL (US 5,500,465) for the reasons stated in the Final Office Action mailed 5/3/2007.

Response to Arguments

7. Applicant's arguments filed 7/18/2007 have been fully considered but they are not persuasive.

(A) Applicants' arguments directed to the proposed amendments and the Kelly Affidavit filed 7/18/2007 have been noted but are moot because the proposed amendments and the Kelly Affidavit have NOT been entered.

(B) Applicant argues that CHEN fails to disclose the claimed invention in its entirety. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

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combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

(C) Applicant argues that GRUBER teaches away from CHEN and the claimed composition because the reference teaches the production of a highly specific type of PLA polymers. As an initial matter, since CHEN does not require the use of a particular type of polylactide polymer, one of ordinary skill in the art would reasonably believe that a variety of polylactide resins may be suitably used in the disclosed blend composition. It would be obvious to one of ordinary skill in the art to use a known polylactide resin such as those disclosed in GRUBER, which are known to have highly desirable extrusion and melt processing characteristics in the compositions of CHEN, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Applicant has not provided probative evidence to the contrary.

(D) Applicant argues that the teachings in GRUBER are incompatible with the teachings in CHEN because GRUBER discloses non-plasticized polylactide resin formulations. However, the reference *clearly and explicitly* states that the disclosed polylactide compositions can contain plasticizers (GRUBER, line 6-33, col. 28).

(E) Applicant argues that GRUBER teaches away from the claimed invention because the reference merely disclose methods of creating polylactide resins. However, contrary to Applicant's assertions, GRUBER clearly states that the addition of organic peroxides can take place *after* the polylactide resins are formed (GRUBER, line 1-6, col. 15) -- in other words, the peroxide can be added to an already formed polylactide acid polymer.

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(F) Applicant argues that MOHANTY teaches away from the claimed invention because it is directed to flooring materials. In response to applicant's argument that MOHANTY is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, MOHANTY, CHEN, and GRUBER all deal with polylactide-based polymer compositions and the production of environmentally friendly film and sheet materials formed therefrom. It should be further noted that MOHANTY incorporates the CHEN '651 reference in its entirety (MOHANTY, line 54-56, col. 1), as well as incorporating in their entirety two GRUBER references (US 5,998,552 and 6,291,597) which are both direct continuations of the GRUBER '095 reference relied upon in the present rejections. Therefore, one of ordinary skill in the art would reasonably believe the teachings in MOHANTY may be beneficially applied to the polylactide resin compositions in both the CHEN '651 and GRUBER '095 references. Applicant has not provided any probative evidence to the contrary.

(G) Applicant argues that KRISHMAN teaches away from the claimed invention because it is directed to the use of peroxides to crosslink poly(epsilon-caprolactone) resins. However, since the compositions in CHEN '651 contain poly(epsilon-caprolactone), one of ordinary skill in the art would reasonably apply known conventional and/or beneficial modifications such as the use of peroxides to crosslink poly(epsilon-caprolactone) resins as taught in KRISHMAN in order to improve the overall rheological properties of the CHEN '651

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blend compositions. Applicant has not provided any probative evidence of criticality or unexpected results commensurate in scope with the present claims.

(H) Applicant argues that MOHANTY and KRISHMAN teach away from GRUBER '095 because in MOHANTY and KRISHMAN, the peroxides are used for produce crosslinking in either polylactide resins or poly(epsilon-caprolactone) resins, while GRUBER '095 uses peroxides to provide "bridging in the linear lactide polymer thereby converting it into a less linear lactide polymer" (Applicant's arguments). However, Applicant's phrasing somewhat obscures the actual teaching in GRUBER '095 -- GRUBER '095 clearly states that the peroxides are used to provide "small amounts of bonding *between* linear polylactide molecules" (GRUBER, line 31-35, col. 14) (emphasis added) for the purpose of enhancing its rheological properties. Since "crosslinking" is typically defined as the linking of polymer molecules together via chemical bonds, GRUBER essentially appears to be using peroxides to induce minor amounts of crosslinking in the polylactide resins. Regardless of the specific terms used (e.g., "crosslinking" or "bonding" or "bridging"), GRUBER and MOHANTY and KRISHMAN are essentially using peroxides to accomplish the same function -- inducing chemical bonds between polymer molecules in order to enhance the rheological and melt-processing characteristics of the polymer. Therefore, contrary to Applicant's arguments, there is nothing in MOHANTY or KRISHMAN which is incompatible or changes the principle of operation of the blends in CHEN or the polylactide resin in GRUBER. Similarly, there is nothing in the GRUBER reference which is incompatible or changes the underlying principle of operation in the blends of CHEN.

(I) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or

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modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, CHEN is relied upon to disclose polylactide blends containing poly(epsilon-caprolactone), while GRUBER discloses a known polylactide resin with advantageous properties in addition to disclosing conventional applications for biodegradable polylactide-based compositions. GRUBER and MOHANTY and KRISHMAN all discloses the advantages of incorporating minor amounts of peroxides into biodegradable polymers (e.g., polylactides, poly(epsilon-caprolactone)) to modify and/or enhance rheological and melt properties. Applicant has not provided any probative evidence of criticality or unexpected results commensurate in scope with the present claims from the recited peroxides.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 3, 2007



Vivian Chen
Primary Examiner
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